

1) Family number: 15899314 (US2004099323 AA)

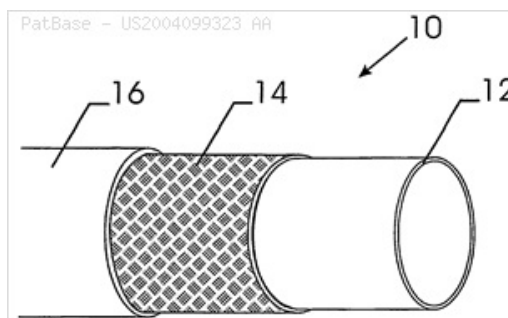
© PatBase

Title: BRAIDED HOSE REINFORCEMENT AND METHOD OF MANUFACTURE
Priority: EP20000201942 20000531 WO2001EP05019 20010504 EP20010943317 20010504
Family:

Publication number	Publication date	Application number	Application date
AT322641 E	20060415	AT20010943317T	20010504
AU200165922 A1	20011211	AU20010065922	20010504
AU200165922 A5	20011211	AU20010065922D	20010504
AU2001265922 AA	20011211	AU20010265922	20010504
BRPI0111122 A	20030408	BR2001PI11122	20010504
BRPI0111122 B1	20101019	BR2001PI11122	20010504
DE60118561 D1	20060518	DE20016018561T	20010504
DE60118561 T2	20070405	DE20016018561T	20010504
EP1295061 A1	20030326	EP20010943317	20010504
EP1295061 B1	20060405	EP20010943317	20010504
JP2003535291 T2	20031125	JP20020500141T	20010504
JP4783538 B2	20110928	JP20020500141T	20010504
US2004099323 AA	20040527	US20020296064	20021121
US6883551 BB	20050426	US20020296064	20021121
WO0192770 A1	20011206	WO2001EP05019	20010504

Probable Assignee: BEKAERT NV SA
Assignee(s):(std): BEKAERT NV SA ; BEKAERT SA NV ; BOURGOIS LUC ; DAMBRE PAUL ; MEERSSCHAUT DIRK ; RAVELINGIEN LUC
Assignee(s): BEKAERT BEKAERTSTRAAT NVSA ; BOURGOIS LUC ; N V BEKAERT S A ; N V BEKAERT S A ZWEVEGEM ; N V BEKAERT SOCIETE ANONYME
Inventor(s):(std): BOURGOIS LUC ; BOURGOIS LUC ; DAMBRE PAUL ; MEERSSCHAUT DIRK ; RAVELINGIEN LUC
Inventor(s): DIRK MEERSSCHAUT ; LUC BOURGOIS ; LUC RAVELINGIEN ; PAUL DAMBRE
Agent(s): FOLEY AND LARDNER LLP
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
International class (IPC 8-9): D04C1/06 F16L11/08 F16L11/10
International class (IPC 1-7): D04C1/06 F16L11/00 F16L11/08 F16L11/10
CPC: D04C1/06 D10B2505/02 F16L11/085 F16L11/10 Y10S138/05 Y10T428/1393
US class: 138/127 138/13 138/130 138/134 138/153 138/DIG.5 428/36.91 138/DIG.005
[Classification Explorer](#)
Cited documents: FR1522053 A, EP0246019 A2, US6302152 BA, US5956935 A, US5655572 A, US5338380 A, US4952262 A, US4688605 A, US5927345 A, US6408891 BA, US4836080 A, US4259991 A, US6039084 A, US3944453 A, US4802510 A, US4567917 A, US6170533 BA, US4427033 A, JP61103086 A2, JPS61103086, US4275937 A,
Forward Citations: CN102334256 B, WO07020503 A3, WO10055486 A3, WO07020503 A2, EP2426389 A1, ITMI20101593 A1, AU2006281134 BB, FR2845922 A1, US2019003619 AA, US10508760 BB, US2011036442 AA, US2008156387 AA, US2005067034 AA, US2005036276 AA,
DE202011108410 U1
US7614428 BB, US7493918 BB, JP2009505017 T2, US8783300 BB,

Abstract:
A braided hose reinforcement (14) comprises left and right turning strips (20, 22). Each of said strips comprises a number of steel wires. The steel wires (24) located at the side regions of the strips have a tensile strength which is substantially lower than the tensile strength of the steel wires of the central region.



2) Family number: 3616870 (DE3332550 A1)

© PatBase

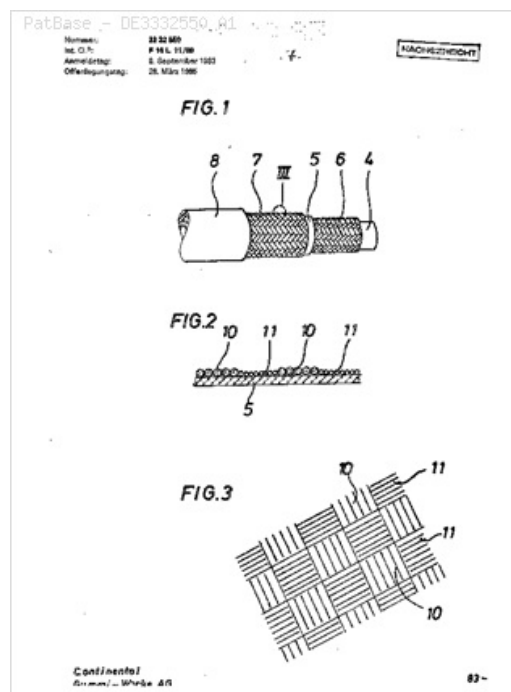
Title: Hose
Priority: DE19833332550 19830909
Family:

Publication number	Publication date	Application number	Application date
DE3332550 A1	19850328	DE19833332550	19830909
DE3332550 C2	19861023	DE19833332550	19830909

Probable Assignee: CONTINENTAL GUMMI WERKE AG
Assignee(s):(std): CONTINENTAL GUMMI WERKE AG
Assignee(s): CONTINENTAL GUMMI WERKE AG 3000 HANNOVER DE
Inventor(s):(std): BECHE ANTON ; HECKER ROLF ; SCHWARZE KLAUS DIPL ING
Inventor(s): BECHE ANTON 3540 KORBACH DE ; HECKER ROLF 3544 WALDECK FREIENHAGEN DE
International class (IPC 8-9): F16L11/08
International class (IPC 1-7): F16L11/08
CPC: F16L11/086
[Classification Explorer](#)
Forward Citations: US7681600 BB, DE3840584 A1, EP2426389 A1, ITMI20101593 A1, EP0427682 A1, DE4118023 C2,

Abstract:

The subject-matter of the invention is technical hoses which are suitable for absorbing high internal pressure as a result of strength carriers in the form of threads being embedded in a mutually crossing arrangement in two or more layers in their wall, and which are at the same time free of restoring forces. According to the invention, the strength carriers are formed by textile threads in the one direction and by metal wires in the other direction. The novel combination primarily offers special advantages for the production of the hoses.

**3) Family number: 15899332** (US2003129336 AA)

© PatBase

Title: BRAID REINFORCED FLEXIBLE HOSE
Priority: EP20000201943 20000531 WO2001EP05021 20010504 EP20010925579 20010504
Family:

Publication number	Publication date	Application number	Application date
AT310194 E	20051215	AT20010925579T	20010504
AU200152279 A1	20011211	AU20010052279	20010504
AU200152279 A5	20011211	AU20010052279	20010504
AU2001252279 AA	20011211	AU20010252279	20010504
BRPI0111212 A	20030401	BR2001PI11212	20010504
BRPI0111212 B1	20110309	BR2001PI11212	20010504
DE60115026 D1	20051222	DE20016015026T	20010504
DE60115026 T2	20060727	DE20016015026T	20010504
EP1287281 A1	20030305	EP20010925579	20010504
EP1287281 B1	20051116	EP20010925579	20010504
ES2250382 T3	20060416	ES20010925579T	20010504
JP2003535292 T2	20031125	JP20020500142T	20010504
JP4842495 B2	20111221	JP20020500142T	20010504
US7566486 BB	20090728	US20010296052	20010504
US2003129336 AA	20030710	US20020296052	20021121
WO0192771 A1	20011206	WO2001EP05021	20010504

Probable Assignee: BEKAERT NV SA
Assignee(s):(std): BEKAERT NV SA ; BEKAERT SA NV ; BOURGOIS LUC ; DAMBRE PAUL ; MEERSSCHAUT DIRK ;

RAVELINGIEN LUC

Assignee(s): N V BEKAERT S A ; N V BEKAERT S A ZWEVEGEM ; N V BEKAERT SOCIETE ANONYME

Inventor(s):(std): BOURGOIS LUC ; DAMBRE PAUL ; MEERSSCHAUT DIRK ; RAVELINGIEN LUC

Inventor(s): DIRK MEERSSCHAUT ; LUC BOURGOIS ; LUC RAVELINGIEN ; PAUL DAMBRE

Agent(s): FOLEY AND LARDNER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8-9): B32B1/00 B32B1/08 D04C1/00 D04C1/02 D04C1/06 F16L11/04 F16L11/08 F16L11/10

International class (IPC 1-7): B32B1/08 D04C1/02 F16L11/08 F16L11/10

CPC: D04C1/02 D04C1/06 D07B2201/2016 D07B2201/209 D07B2201/2092 D10B2505/02 F16L11/085 F16L11/10 Y10T428/1352 Y10T428/1355 Y10T428/1369 Y10T428/1386 Y10T428/139 Y10T428/1393

US class: 138/123 138/125 138/127 428/35.7 428/35.8 428/36.3 428/36.8 428/36.9 428/36.91

[Classification Explorer](#)

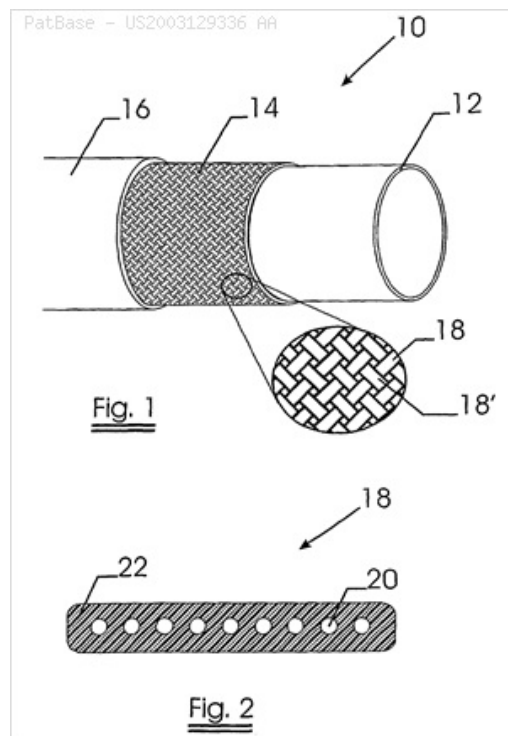
Cited documents: WO9920682 A1, US5956935 A, US3868974 A, GB863837 A, FR2576040 A1, US5545208 A, US4275937 A, US3817288 A, US3740958 A, US3670774 A, US4384595 A, US4153079 A, JP26011682 Y1, JP47038500 Y1, EP0153544 A1, EP0370134 A1, US3726321 A, US3599677 A,

Forward Citations: US10508760 BB, EP2775184 B1, WO17005805 A1, EP2775184 A1, EP2426389 A1, ITMI20101593 A1, US8026296 BB,

DE102009035822 A1

EP2048422 A1, US10478583 BB, US9908634 BB, US2017305569 AA, US9533117 BB, US8905082 BB, US2007218230 AA, US2009126817 AA, US2008072985 AA, US2014251484 AA, US8056584 BB, US10281064 BB, US10228081 BB, US2011036442 AA, US2015300537 AA, US2015292651 AA, US2006112560 AA, US2005082852 AA, US2005023847 AA, US2004124287 AA, US2003184099 AA, US8783300 BB, US7111882 BB, US7007990 BB, US6883843 BB, US7222644 BB,

Abstract:
A braided hose reinforcement comprises left and right turning strips. Each of said strips comprises a number of elongated metal elements embedded in a matrix of a polymer material.



4) Family number: 7798634 (DE3840584 A1)

© PatBase

Title: Pressure hose with braiding insert of flat-strip material

Priority: DE19883840584 19881202

Family:	Publication number	Publication date	Application number	Application date
	DE3840584 A1	19900607	DE19883840584	19881202

Probable Assignee: CONTINENTAL AG

Assignee(s):(std): CONTINENTAL AG

Assignee(s): CONTINENTAL AKTIENGESELLSCHAFT 3000 HANNOVER DE

Inventor(s):(std): HECKER ROLF

Inventor(s): HECKER ROLF 3544 WALDECK DE

International class (IPC 8-9): F16L11/08

International class (IPC 1-7): F16L11/08

CPC: F16L11/086

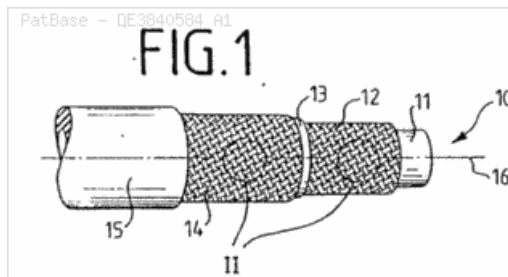
[Classification Explorer](#)

Cited documents: EP0263940 A2, DE3332550 C2, DE2946385 A1, DE2918282 A1,

Forward Citations: EP2518382 A3, EP2518382 A2, DE19754448 A1, EP2426389 A1, ITMI20101593 A1, EP1493956 A1, DE19754448 C2, EP1764211 A1, WO0184010 A1,

Abstract:

Pressure hose (10) made of an elastomer with braidings which are wound spirally in one or more mutually separate layers (12, 14) and comprise individual strands of reinforcers which are braided at an angle with respect to the longitudinal axis (16) of the hose. The individual strands of the braiding layers (12, 14) are flat strips.



5) Family number: 43130252 (EP2048422 A1)

© PatBase

Title: BRAIDED HOSE WITH METALLIC OPTICS

Priority: DE200710048889 20071011

Family:

Publication number	Publication date	Application number	Application date
AT487904 E	20101115	AT20080166389T	20081010
DE102007048889 A1	20090416	DE200710048889	20071011
DE502008001749 D1	20101223	DE200850001749T	20081010
DK2048422 T3	20110214	DK20080166389T	20081010
EP2048422 A1	20090415	EP20080166389	20081010
EP2048422 B1	20101110	EP20080166389	20081010
ES2355093 T3	20110322	ES20080166389T	20081010

Probable Assignee: NEOPERL GMBH

Assignee(s):(std): ALBER KUNSTSTOFFTECHNIK GMBH ; NEOPERL GMBH

Inventor(s):(std): ALBER FREIHERR VON GLANSTAETTE ; ALBER FREIHERR VON GLANSTAETTEN HELMAR ; ALBER FREIHERR VON GLANSTAETTEN TASSIL ; ALBER FREIHERR VON GLANSTAETTEN TASSILO

Agent(s): BARZ PETER; PATENT UND RECHTSANWALTSSOZIETAET MAUCHER BOERJES AND KOLLEGEN

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

International class (IPC 8-9): E03C1/02 F16L11/02 F16L11/08 F16L11/10 F16L11/20 F16L33/22

CPC: D04C1/02 E03C1/025 F16L11/085 F16L11/10 F16L11/124

[Classification Explorer](#)

Cited documents: WO0192771 A1, US6302152 BA, EP1271034 A1,

DE202005004617 U1

EP0465837 A1,

Forward Citations: EP2775184 B1, EP2479327 B1, US9506170 BB, AU2012208522 BB, CN103459692 A, CN103459690 A, CN103459692 B, CN104033671 A, CN103459690 B, EP2775184 A1, WO12098209 A1, EP2479327 A1, EP2426389 A1, ITMI20101593 A1,

DE102013003831 B4

DE102013003831 A1

DE202013104202 U1

Abstract:

The hose has an inner hose braided with a meshwork including a meshwork component made of metal or a metalized strand that is a metalized band and coated with plastic. The meshwork has another meshwork component i.e. monofilament, made of metallic pigmented or metallic base pigmented plastic. The former component has a metalized foil coated with plastic. The latter component is transparently pigmented. Each component covers 50 percent of the hose. The components are arranged in a braiding direction so that a longitudinal striped structure is formed.

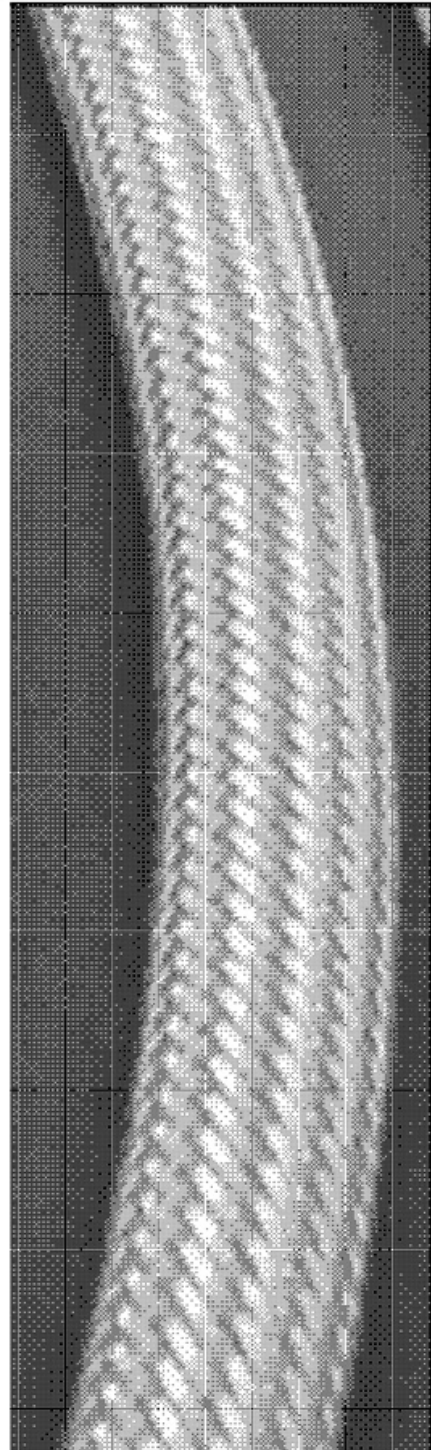


Fig. 1

6) Family number: 17379549 (FR2491190 A1)

© PatBase

Title: FLEXIBLE HOSE FOR SANITARY PLUMBING - REINFORCED WITH BRAIDED ALUMINIUM PROTECTED BY A TRANSPARENT COATING, PREF. POLYESTER

Priority: IT19800022972U 19801001

Family:	Publication number	Publication date	Application number	Application date
	DE8127450 U1	19820217	DE19810027450U	19810917
	FR2491190 A1	19820402	FR19810018185	19810924
	IT8022972 U0	19801001	IT19800022972U	19801001

Probable Assignee: CESARE PARIGI

Assignee(s): (std): CESARE PARIGI ; PARIGI CESARE

Assignee(s): PARIGI CESARE 20052 MONZA MILANO IT

International class E03C E03C1/02 F16L11/04 F16L11/10

(IPC 8-9):

International class F16L11/10

(IPC 1-7):

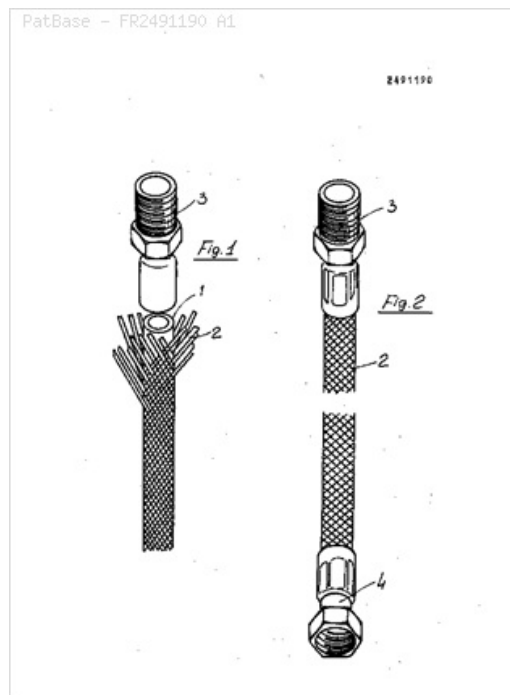
CPC: E03C1/021 E03C1/025 F16L11/10

[Classification Explorer](#)

Forward Citations: EP2426389 A1, ITMI20101593 A1,

Abstract:

A flexible hose for coupling to tops on sanitary fittings comprises a flexible rubber or plastic core tube surrounded by a braid made of aluminium strips sheathed with a transparent plastic matl., pref. polyethylene terephthalate. The coating protects the Al from oxidn., avoiding use of more expensive metals or alloys. Pref. the Al strip has a bright surface finish. The bases can be fitted with conventional (compression) couplings.



7) Family number: 30081855 (EP1114959 A2)

© PatBase

Title: HIGH-STRENGTH, DURABLY-FLEXIBLE HOSE FOR HYDRAULIC COUPLING APPLICATIONS

Priority: IT2000MI00003U 20000104

Family:

Publication number	Publication date	Application number	Application date
AT324541 E	20060515	AT20000127667T	20001218
DE60027527 D1	20060601	DE20006027527T	20001218
DE60027527 T2	20061221	DE20006027527T	20001218
EP1114959 A2	20010711	EP20000127667	20001218
EP1114959 A3	20030319	EP20000127667	20001218
EP1114959 B1	20060426	EP20000127667	20001218
IT249685 Y1	20030528	IT2000MI00003U	20000104
ITMI200000003 U0	20000104	IT2000MI00003U	20000104
ITMI200000003 U1	20010704	IT2000MI00003U	20000104

Probable Assignee: PARIGI GROUP INT SPA

Assignee(s):(std): PARIGI CESARE ; PARIGI GROUP INT S P A ; PARIGI GROUP INTERNAT S P A

Assignee(s): PARIGI GROUP INTERNATIONAL S P A

Inventor(s):(std): PARIGI CESARE

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

International class F16L11/04 F16L11/08 F16L11/10

(IPC 8-9):

International class F16L11/10

(IPC 1-7):

CPC: E03C1/021 F16L11/10

[Classification Explorer](#)

Cited documents: US5973268 A, US5778941 A, US4668318 A,

Forward Citations: US8220498 BB, EP2426389 A1, ITMI20101593 A1, EP1964706 A1,

Abstract:

The present invention relates to a high strength and duration flexible hose, specifically designed for hydraulic coupling applications, comprising a flexible pipe provided with coupling end fittings and housed in a braided sheath. The main feature of the invention is that the sheath is made by braiding polyester threads, the polyester threads being coated by a polyvinylchloride material.

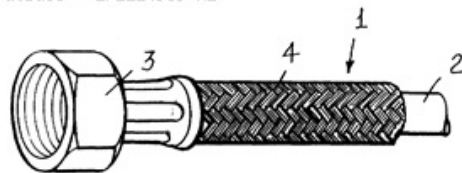


FIG. 1

8) Family number: 30391149 (ES222695 U)

© PatBase

Title: FLEXIBLE TUBE PERFECTED FOR HYDRAULIC INSTALLATIONS. (MACHINE-TRANSLATION BY GOOGLE TRANSLATE, NOT LEGALLY BINDING)

Priority: IT19750022875 19750430 IT19750000228U 19751212

Publication number	Publication date	Application number	Application date
BE844594 A	19761116	BE19760169306	19760728
DE7635138 U1	19770505	DE19760035138U	19761103
ES222695 U	19761116	ES19760222695U	19760803
ES222695 Y	19770316	ES19760222695U	19760803
PT65321 A	19760801	PT19760065321	19760706
PT65321 B	19780105	PT19760065321	19760706

Probable Assignee: CESARE PARIGI

Assignee(s):(std): CESARE PARIGI ; PARIGI C ; PARIGI CESARE

Assignee(s): PARIGI CESARE MONZA (ITALIEN) ; PARIGI CESARE MONZA ITALIEN

Inventor(s):(std): PARIGI C

Inventor(s): C PARIGI

International class (IPC 8-9): A47L9/24 D06F39/08 F16L F16L11/00 F16L11/04 F16L11/10 F16L11/14 F16L31/00 F16L33/20 F16L33/207

International class (IPC 1-7): A47L9/24 D06F39/08 F16L11/14 F16L31/00

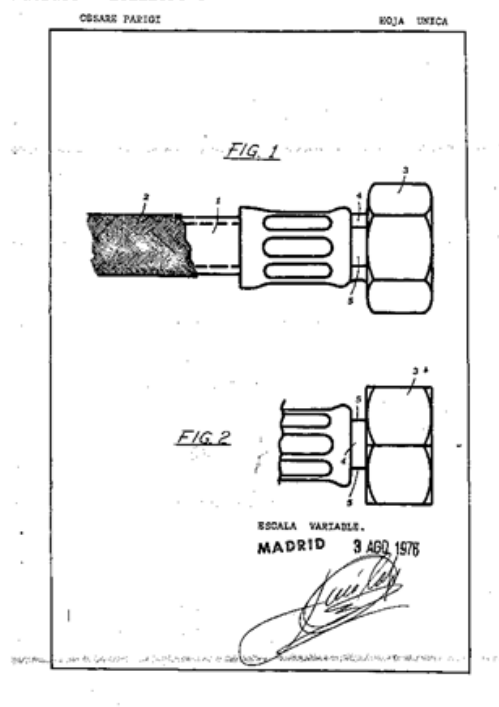
CPC: E03C1/021 F16L11/10 F16L33/2073

[Classification Explorer](#)

Forward Citations: ITMI20101593 A1, EP2426389 A1,

Abstract:

Improved flexible tube for hydraulic installations, characterized by the fact of being formed by a tubular rubber core, which is tightly covered by a braid of stainless steel wires, which completely cover its surface. (Machine-translation by Google Translate, not legally binding)

**9) Family number: 68580250** (US2018045342 AA)

© PatBase

Title: BRAIDED HOSE

Priority: US20160373672P 20160810 US20160373672P 20160811 WO2017MX00094 20170811
US20170675579 20170811

Family:	Publication number	Publication date	Application number	Application date
	CL2019000314 A1	20190503	CL20190000314	20190207
	CL60234 B	20200731	CL20190000314	20190207
	CO20190001129 A2	20190219	CO20190001129	20190207
	MX2019001626 A1	20190509	MX20190001626	20170811
	PE20190387 A1	20190313	PE20190000347	20170811
	US10151407 BB	20181211	US20170675579	20170811
	US2018045342 AA	20180215	US20170675579	20170811
	WO18030886 A1	20180215	WO2017MX00094	20170811

Probable Assignee: COFLEX DE CV SA

Assignee(s):(std): COFLEX DE CV SA

Assignee(s): COFLEX S A DE C V

Inventor(s):(std): CORONADO EDUARDO ; EDUARDO CORONADO ; GONZALEZ PEDRO ; GONZALEZ PEDRO M ; PEDRO GONZALEZ

Agent(s): BAKER AND MCKENZIE LLP; ESTRADA RODRIGUEZ LAURA EUDOSIA; VENTURELLI SANTA MARIA VALENTINA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): B65H81/00 E03C1/02 F16L11/00 F16L11/04 F16L11/08 F16L11/10 F16L33/207

CPC: B65H81/00 E03C1/021 E03C1/025 F16L11/085 F16L11/10 F16L33/2071

US class: 1/1 251/150

[Classification Explorer](#)

Cited documents: EP2426389 A1, EP0069957 A2, US2014251484 AA, US2010126617 AA, US8858530 BB, US8356637 BB, US6978805 BB, US5562126 A, US4802510 A, US4662405 A, US44200018, US4420018 A, US4275937 A,

Abstract:

A reinforced hose includes a tube and a braided sleeve disposed about an outside of the tube. The braided sleeve includes a plurality of bundles. A bundle may be defined as a plurality of threads extending along a same path of a braiding pattern of the braided sleeve. At least one of the bundles includes a metallic thread and a non-metallic thread.

